



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,739	09/30/2003	Kamran A. Qazi	CE10514R/10-180	5994

23400 7590 04/11/2007  
POSZ LAW GROUP, PLC  
12040 SOUTH LAKES DRIVE  
SUITE 101  
RESTON, VA 20191

EXAMINER
----------

CASCA, FRED A

ART UNIT	PAPER NUMBER
----------	--------------

2617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/11/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/675,739		QAZI ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Fred A. Casca		2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____                                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/30/04</u> .   | 6) <input type="checkbox"/> Other: ____                           |

***DETAILED ACTION***

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 6-9, 11-14, and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ameigeiras et al (US 2004/0052234 A1) in view of Leung et al (U.S. Patent No. 6,262,980).

Referring to claim 1, Ameigeiras discloses a method in a wireless communication system (abstract) employing a communication protocol in which a retransmission timeout value is calculated by a sender from a round-trip time (abstract, paragraphs 11,29, "mobile telecommunication system", "TCP"), the method for preventing a spurious retransmission during a planned interruption of communications (abstract and paragraph 29, "unnecessary retransmission of a TCP segment can be avoided"), the method comprising progressively increasing the round-trip time for a plurality of successive data segments sent before the planned interruption occurs, such that the retransmission timeout value becomes larger than a time required to complete, thereby preventing the spurious retransmission (paragraphs 1, 13, 18-20, 29, 31, 39, 56, "retransmission of a TCP segment can be avoided", "RTT can increase").

Ameigeiras does not disclose determining whether the planned interruption is about to occur.

Leung discloses determining whether a planned interruption is about to occur (abstract and col. 4, lines 20-65, “information is transmitted in time subframes scheduled to avoid interference”, “time subframes scheduled”).

It would have been obvious to one of the ordinary skills in the art at the time of invention to modify the method of Ameigeiras by incorporating the teachings of Leung into that of Ameigeiras and consequently allowing the RTT intervals to be increased for scheduled busy traffic times to avoid spurious retransmission, for the purpose of providing an efficient transmission/retransmission method and avoiding overhead and unnecessary traffic congestion.

Referring to claim 2, the combinations of Ameigeiras/Leung disclose the method of claim 1, and further disclose progressively increasing the round-trip time comprises increasing the round-trip time for each data segment of the plurality of successive data segments by an amount insufficient to exceed the retransmission timeout value when the data segment is sent (col. 4, lines 20-65,).

Referring to claim 3, the combinations of Ameigeiras/Leung disclose the method of claim 1, and further disclose the communication protocol is a self-clocking protocol and wherein progressively increasing the round-trip time comprises adding a delay in only one direction of a two-way communication channel.

Referring to claim 4, the combinations of Ameigeiras/Leung disclose the method of claim 1, and further disclose the communication protocol is Transmission Control Protocol (TCP) (paragraphs 29, and 56, 62).

Art Unit: 2617

The combinations of Ameigeiras/Leung does not disclose the method further comprises progressively increasing the round-trip time for each data segment of the plurality of successive data segments by about 400 milliseconds more than that of an immediately previous segment.

It would have been obvious design choice to modify Ameigeiras/Leung's invention by increasing the round-trip time for each data segment of the plurality of successive data segments by about 400 milliseconds more than that of an immediately previous segment, since applicant has not disclosed that having the specific 400 milliseconds solves any stated problems or is for any particular purpose and it appears the increasing of RTT would perform equally well with any period than the normal operation period as suggested by Ameigeiras/Leung.

Referring to claims 6-9, claims 6-9 define a mobile station reciting features analogous to the features of the method of claims 1-4 (as rejected above). Thus, the combinations of Ameigeiras/Leung disclose all elements of claims 6-9 (please see the rejection of claim 1-4 above).

Referring to claims 11-14, claims 11-14 define a base station reciting features analogous to the features of the method of claims 1-4 (as rejected above). Thus, the combinations of Ameigeiras/Leung disclose all elements of claims 11-14 (please see the rejection of claim 1-4 above).

Referring to claims 16-19, claims 16-19 define a wireless communication system reciting features analogous to the features of the method of claims 1-4 (as rejected

Art Unit: 2617

above). Thus, the combinations of Ameigeiras/Leung disclose all elements of claims 16-19 (please see the rejection of claim 1-4 above).

3. Claims 5, 10, 15, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ameigeiras et al (US 2004/0052234 A1) in view of Leung et al (U.S. Patent No. 6,262,980) and further in view of well known art (MPEP 2144.03).

Referring to claim 5, the combinations of Ameigeiras/Leung disclose the method of claim 1.

The combinations of Ameigeiras/Leung do not disclose the planned interruption of communications is caused by a break-before make handoff of a mobile station from a first cell to a second cell.

The examiner takes official notice of the fact that break-before concept is well known in the art e.g., in GSM hard handoffs.

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the method of Ameigeiras/Leung by incorporating the teachings of well-known art, for the purpose of avoiding assigning resources unnecessarily longer.

Referring to claim 10, claim 10 defines a mobile station reciting features analogous to the features of the method of claim 5 (as rejected above). Thus, the combinations of Ameigeiras/Leung disclose all elements of claims 10 (please see the rejection of claim 5 above).

Referring to claim 15, claim 15 defines a base station reciting features analogous to the features of the method of claim 5 (as rejected above). Thus, the combinations of

Art Unit: 2617

Ameigeiras/Leung disclose all elements of claims 15 (please see the rejection of claim 5 above).

Referring to claim 20, claim 20 defines a wireless communication system reciting features analogous to the features of the method of claim 5 (as rejected above). Thus, the combinations of Ameigeiras/Leung disclose all elements of claims 20 (please see the rejection of claim 5 above).

*Conclusion*

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred A. Casca whose telephone number is (571) 272-7918. The examiner can normally be reached on Monday through Friday from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid, can be reached at (571) 272-7922. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
LESTER G. KINCAID  
SUPERVISORY PRIMARY EXAMINER